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ABSTRACT

Critical evaluation of instructional materials is an important but often neglected aspect of instructional preparation. This study proposes evaluation that is more theoretically grounded in sociocultural and context-sensitive bases than are many evaluation guides. A new instrument was developed and applied to materials for teacher education as part of a multiphase project that will eventually produce a brief history of the teaching of media utilization and will analyze several instructional materials. A presentation was given introducing postmodernism and its emergence as an important viewpoint for educators. An evaluation activity followed, using the new evaluation form, which participants used and critiqued. The presentation session suggested that typical evaluation forms and models are little used because they are severely restricted in their conceptions of learning. Extended understandings of knowing and learning will be the basis of additional work in this ongoing project. A copy of the evaluation form is included. Twelve suggestions are given for further reading. (Contains 10 references.) (SLD)

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ED 362 190

Title:

Criticizing Instructional Materials Evaluation: Adding Meaningful Dimension

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Criticizing Instructional Materials Evaluation: Adding Meaningful Dimension

Overview

Critical evaluation of instructional materials is an important but often neglected aspect of instructional preparation. Teachers do not usually select their instructional materials (in whatever the format) according to formal, generalized, research-based prescriptions for doing so. And only rarely do teachers consider criteria beyond those which are achievement and technically oriented (Rothe, 1991). Instead, we are likely to develop and use our personal, situated routines to select and evaluate materials. This study suggests evaluation that is more theoretically grounded in socio-cultural and local, context-sensitive bases than are many current selection/evaluation guides. It reviews the development of evaluation tools, provides new measures, and applies new measures to current visual materials. A new evaluation instrument was developed and applied to materials for teacher education. From preliminary research in this area, we expect the interpretation to reveal a number of explicit and implicit ideological stereotypes and assumptions about our beliefs about teachers, teaching, classrooms, and mediated education. We believe as our project continues that examining this visual material will provide new understanding of our field and our educational beliefs.

Background and Rationale

Evaluation of materials has traditionally been derived from behavioral theory and the systematic design of instruction so basic to our field. Within these theories, learning is conceived narrowly as the learning objectives and the methods used to get students to achieve those objectives. The limitations of these theories as a basis for evaluation or selection of materials have been repeatedly pointed out by current critics of educational technology. Bowers (1988) discusses the "current blindness" of the "conduit" view of software evaluation, for example (p. 47). Bowers goes on to critique the instructional procedures of an evaluation model based upon Gagne's events of instruction. He points out that such a model ignores the subjectivity of language and the awareness of the influence of language on thought. This is just one example of criticism which points out the severe limitations of our current evaluation models.

The field of educational communications needs to revisit our theoretical basis for the simple models of evaluation or selection which we have been using for so long. Kerr (1985) has suggested that methods drawn from sociology, policy sciences, and anthropology could "shed new light on problems that have traditionally been approached using psychological research methods" (p. 4) Kerr believed that asking new questions in less traditional ways was critical to the future of education. With more multi-cultural and critical dimensions of education becoming a reality, the area of materials evaluation and selection and the messages being given to teachers need to be re-examined.

Eisner (Eisner and Peshkin, 1990) suggests new methods, and comments on the limitations of old models. "The methods into which we have been socialized provide powerful filters through which we view the world. If we are predisposed to focus upon the unique features of a person or situation and skilled in their literary description, we are likely to attend to classrooms in ways that emphasize or make salient the idiosyncratic. If we are inclined toward the description of measured relationships or the incidence of events, if what we are inclined to think about is how things co-vary, we see the "same" classroom from a very different angle and with a very different intent. In short, our methodological concepts influence our perception. Thereafter, cognitive maps help us find our way in the territories

we wish to explore. Those with different maps tend to take different roads." (p. 9) Eisner points out that our methods create filters on our perceptions.

Yeaman (1991) discusses the importance of the socio-cultural aspects of our field, which he calls neglected. "Educational communications and technology research concentrates on the efficiency of learning stimuli, instructional techniques and matching these with student characteristics." (p. 990)

And Ellsworth (Ellsworth and Whatley, 1990) has commented that: "Such research privileges questions of how individuals process information from educational media over and above questions about the ideological work of meaning construction, content selection, setting of objectives, and media use. The concept of information processing as developed within cognitive psychology and applied in educational technology cannot explain meaning, intent and significance." (p. 49)

An examination of evaluation from a socio-cultural viewpoint begins to provide more powerful and meaningful dimensions in the evaluation of media materials, historical or cutting edge. This project begins to integrate media criticism and post-structuralism as a basis for improved evaluation, and provides a sample application. The application involves visual materials for teacher education: film, video and multi-media.

Teachers have conceptual and attitudinal knowledge of technology based on their experience and the methods and materials used to teach them about the technology. These materials remain largely unexplored from both an aesthetic and a critical or formal perspective. Likewise, only recently have a few scholars turned their critical attention to educational films and videos in order to explain their messages, overt and otherwise. The visual representations and the actual construction of knowledge in these materials are now beginning to be investigated. Ellsworth's (Ellsworth and Whatley, 1990) research is an example of such work and is used to guide the work presented here.

In their text, *The Ideology of Images in Educational Media*, (1990), Ellsworth and Whatley discuss this recent move to examine the ideology of images. They point out that until very recently, educational communications research was still focused on effectiveness and on how learners gain from mediated messages. Recently, educational media researchers have turned their attention to educational films and other materials, and are investigating the visual representations and the actual construction of knowledge. Ellsworth's study cites examples of research examining science and health films and print materials.

The aim of this multi-phase project is to suggest substantial changes in the ways teachers evaluate curricular materials for teaching; to begin an historical record of our field in terms of film and video; and to bring a more grounded and broadly literate understanding of instructional materials to both theorists and practitioners.

The results will be summarized and examined for the messages we can discover involving materials, teachers, pedagogy, and technology. In addition, this work will focus on the hidden curriculum of such messages, describe what was considered valid knowledge, and determine who possessed it. Our educational culture will be described, and new ways of looking at educational media will be explored. In completing this project we will produce a brief history of the teaching of media utilization and evaluation, test a new evaluation tool, and analyze several mediated materials.

Analyzing Materials

The presentation itself was an introduction to postmodernism and its emergence as an important viewpoint for educators (see Suggested Reading List), followed by an evaluation activity. Questions raised by a postmodern perspective include issues of emancipation, ethical behaviors, and empowerment. In media postmodernism leads us to question who is delegitimized and "othered" by mass media such as television. These same questions were then raised while reviewing a newer educational videotape from a series. A new evaluation form based upon work by Rothe (1991) was shared. This form was prepared using socio-cultural analysis aspects to provide several meaningful new dimensions to the evaluation process (see Instructional Materials Evaluation). Participants were invited to use and critique this new instrument, and comment upon its perspective and its usability. Discussion followed about the process and the viability of socio-cultural evaluation in schools and by teachers. The new form encourages viewers to "see" in a new way; to not ignore important, if subliminal, visual aspects.

This presentation session suggested that typical evaluation forms and models are little used because they are severely restricted in their conceptions of learning. Learning is conceived narrowly as the learning objectives and the methods used to get students to achieve those objectives. Too often, evaluation of instruction and instructional materials does do not fully consider the political, economic, language, contextual, and other cultural influences on learning.

Take, for example, the idea of rule learning. A conventional approach usually asks us to evaluate materials based on whether or not students learned the rules of, say, written English as specified by learning objectives. We want to say that someone has learned something more important when he or she has learned those rules and, additionally, understands a variety of meanings of using the formal rules. A person should know when, in what context, she has the option to use one set of languages rules or another.

These extended understandings of knowing/learning are crucial because they are in realms where many, even most, of the important influences on learning reside. We can select a material based upon what it explicitly teaches and how it explicitly teaches discrete knowledge, but if that learning is politically, ecologically, or economically discouraging to the learner and the learner doesn't get a chance to understand the politics, ecology, or economics, to that extent learning (and teaching?) is a failure. For example, if learning is taught as a predominantly individual and cognitive activity devoid of any emotion or community, other useful ways of knowing are apt to be stunted or dominated for powerful purposes.

Likewise, a teacher with a restricted idea of materials and with restricted materials is less likely to see the changes she or he looks for in the learner, whether those changes are task specific (as we say) or are in more general terms of learner attitudes and strategies toward learning and knowing.

An evaluation form such as the standard one reproduced in most Instructional Technology basic textbooks (ie. Heinich, Molenda, and Russell, 1993) asks teachers to examine materials using a very narrow range of issues about learning and appropriateness. The materials are evaluated for their use with a particular audience, and it is assumed that the only learning which needs to be considered is that of the intended objectives of the material. Such a typical form allows no room for cultural analysis; it does not ask teachers to consider the cultural ramifications of the materials, nor does it imply in any way that those are issues a teacher may want to consider when selecting and using any material for their classroom.

A more involved and extended approach to evaluation is one suggested by Rothe (1991). Questions regarding language, culture, power, and inclusiveness are included in such an approach. While teachers may consider this method more time-consuming, it is actually an approach which helps them plan the use of their materials while previewing them. No instructional materials should be included in classroom use without some discussion of their creation and intent. Teachers need to be encouraged by this evaluation process to include discussions about the use of language, images, and the representation of culture which any materials represent. Newer technologies, especially, can "other" people, continuing to severely limit the meanings of what is learned, and avoid questions of ecological damage done by the creation and use of technology.

Just recommending that teachers reconsider their evaluation of materials is not enough, but it is one simple method by which teachers can be encouraged to gain control over materials selection, production, utilization, and evaluation for themselves and for their students. All participants in the education process need to be encouraged to consider the visual, cultural and media literacy issues often avoided by more traditional evaluation procedures. The ideas presented here could be a basis upon which to build a more informed and involved group activity, seeking support for inclusion of the political, economic and cultural issues within the educational milieu.

Copies of handouts are included after the references so that readers may participate further in the ideas suggested by this research. This research project, as it continues, hopes to establish new criteria for the examination and use of visual materials. Teacher educators and teachers will promote a more visually literate audience with these activities. Evaluation of materials becomes one method by which to encourage a reexamination of teaching and learning from a more inclusive cultural dimension.

References

Bordwell, D. and Thompson, K. (1986). *Film art: An introduction* (2nd ed.) New York:Knopf.

Bowers, C.A. (1988). *The Cultural dimensions of educational computing*. New York: Teachers College Press.

Cherryholmes, C.H. (1988). *Power and criticism: Poststructural investigations in education* (Ed). New York: Teachers College Press.

Devereux, F.L. (1935). *The Educational talking picture.* Chicago, IL: The University of Chicago Press, 2nd. ed., pp. 204-210.

Eisner, E. and Peshkin, A. (1990). *Inquiry in Education and the Continuing Debate*. New York: Teachers College Press.

Ellsworth, E. and Whatley, M.H. (1990). (eds.) *The Ideology of images in educational media, hidden curriculums in the classroom*. New York: Teachers College Press.

Heinich, R., Molenda, M., and Russell, J. (1989). *Instructional Media and the New Technologies of Instruction, 3rd edition.* New York: Macmillan Publishing Company.

Kerr, S.T. (1985). Introduction: Asking new questions about technology and the social world of education. *Educational Communication and Technology, A Journal of Theory, Research, and Development*, 33, 1, pp.3-8.

Rothe, J.P. (1991). Critical evaluation of educational software from a social perspective: uncovering some hidden assumptions. In Hlynka, D. and Belland, J. (eds). *Paradigms Regained*, New Jersey: Educational Technology Press, pp. 367-384.

Yeaman, A.R.J. (1990). Sociocultural aspects of computers in education. *Proceedings of Selected Research Paper Presentations at the 1991 Annual Convention of the Association for Educational Communications and Technology*. Ames, Iowa: Iowa State University and A.E.C.T., pp.989-994.

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Instructional Materials Evaluation

Title: _____

Source, Date, Length, Cost: _____

Subject Area/Audience: _____

Brief Description/Subject Matter: _____

_____

Language Usage	Does Not Apply	Not at All Poor	Some-What	Completely Well
1. Is the language used context specific?				
2. Will students understand the concepts presented, especially those presented within metaphors using familiar words in new ways?				
3. Is one point of view presented without the acknowledgement of other possibilities?				
4. Is the language used appropriate to the content but broad enough to allow other points of view?				
Comments:				
Perspectives				
5. Is the framework for content selection explained?				
6. Is the design of the information obvious? Are designers' choices explained?				
7. Does the knowledge presented allow flexibility for student and teacher involvement?				
8. Is this material marketed in an easily usable and available format?				
9. Is material designed to reflect mainstream society's assumptions concerning relevant cultural features such as responsibility, education, career, family, religion, etc.?				

Perspectives Cont.	Does Not Apply	Not at All Poor	Some-What	Completely Well
10. Does the material promote and reflect the distinctive character and values of all cultures?				
11. Is this material directed to the largest number of users to the exclusion of minority or smaller groups within the educational population?				
12. Is the value framework for this material evident?				
13. Are the students or teachers given the opportunity to question or explore the values framework used?				
14. Do the values presented interface with the values held by users?				
Comments:				
Curricular/Strategy Issues				
15. Is this material promoting effective and efficient learning to the exclusion of more broadly-based learning outcomes?				
16. Is the underlying message of this material that technologically driven learning is preferred over other types of learning?				
17. Is the material appropriate educationally rather than selected as a result of some commercial effort?				
18. Is using this material the soundest solution to the educational problem involved?				
Comments:				

Derived from Rothe, J. P. (1991). Critical evaluation of educational software from a social perspective: Uncovering some hidden assumptions. In Hlynka, D. and Belland, J. (eds). *Paradigms Regained*, New Jersey: Educational Technology Press, pp. 367-384.

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Suggestions for Reading

Aronowitz, S. and Giroux, H. (1991). *Postmodern Education*. Minneapolis: University of Minnesota Press.

Barrett, W. (1978). *The illusion of technique*. Garden City, NY: Anchor Press.

Barrett, W. (1987). *Death of the soul*. Garden City, NY: Anchor Books.

Cherryholmes, C. H. (1988) *Power and criticism: Poststructural investigations in education*. New York: Teachers College Press.

Damarin, S. K. (1990). Unthinking educational technology. In The *1989 proceedings of selected research paper presentations of the research and theory division*. Washington, D.C.: The Association for Educational Communications and Technology.

Ellul, J. (1990). *The technological bluff*. Grand Rapids, MI: Eerdmans Pub. Co.

Hlynka, D. and Belland, J. (1991). (Eds.), *Paradigms regained: Uses of illuminative, semiotic and post structural criticism as a mode of inquiry in educational technology*. Englewood Cliffs, NJ: Educational Technology Publications.

Lang, R. M. (Ed.). (1990). [Special issue]. *Journal of Thought.*, 25 (1&2). DeKalb, IL: Northern Illinois University.

McCarthy T. (1991). *Ideals and illusions: On reconstruction and deconstruction in contemporary critical theory*. Cambridge, MA: MIT Press.

Nichols, R. G. (1990). Speculations on a catastrophic future, education, and technology. *Journal of Thought*, 25 (1&2), 126-142.

Ong, W. J. (1982). *From orality to literacy: The technologizing of the word*. New York: Methuen.

Schwoch, J., White, M., & Reilly, S. (1992). *Media knowledge*. Albany, NY: State University of New York Press.